

Abstract

A valve assembly is disclosed generally comprising first and second valve plates mounted between the housing for a pump mechanism and a cover, the first plate having flexing flaps corresponding to apertures in the second plate, and the second plate having flexing flaps corresponding to apertures in the first plate. The flexing flaps and apertures create inlet and outlet valves for fluid being received into and discharged from the pump mechanism. In some embodiments, the valves facilitate the flow of air received and discharged through inlet and outlet ports in a compressor head. In some embodiments, the valves facilitate the flow of air received from an inlet port in a compressor housing.